WHAT IS CLAIMED IS:

1. A wear-premonitory carbon brush holder comprising;

a holder body for receiving therein a carbon brush, which is reciprocately moveable in the holder body along a predetermined path, and

a premonitory circuit having a sensing unit mounted on said holder body for activating said premonitory circuit to generate a predetermined action or a warning signal when the carbon brush moves in the holder body to a predetermined position.

2. The carbon brush holder as defined in claim 1, wherein said holder body comprises a receiving slot for receiving therein said carbon brush and a spring connected between said holder body and said carbon brush; said sensing unit comprises a tongue that is mounted on said holder body and has an end extending into said receiving slot to a position where said spring can touch when said spring extends, thereby activating said premonitory circuit to generate the predetermined action or the warning signal when said spring touches said tongue.

3. The carbon brush as defined in claim 2, wherein said holder body further comprises a copper barrel in which the receiving slot is provided, said copper barrel having a through hole running therethrough between said receiving slot and an outside thereof; said sensing unit further comprises an insulated plug inserted into said through hole of said copper barrel; wherein said tongue is mounted through said insulated plug.

4. The carbon brush as defined in claim 2, wherein said premonitory circuit comprises an alarm indicator for generating the warning signal when said tongue

contacts said spring.

5. The carbon brush as defined in claim 2, wherein said premonitory circuit comprises a normally open switch loop and a warning unit, said switch loop being electrically conducted while said tongue contacts said spring to enable said warning unit to generate the warning signal.

6. The carbon brush as defined in claim 1, wherein said holder body comprises a receiving slot for receiving therein said carbon brush and a spring connected between said holder body and said carbon brush; said sensing unit comprises a first tongue and a second tongue, said first and second tongues being mounted on said holder body and spaced apart from each other for a distance, each of said two tongues having an end extending into said receiving slot, said spring contacting against one of said ends of the tongues when said spring extends to enable said tongue that has said end contacted by said spring to bend to contact the other tongue, further activating said premonitory circuit to generate the action or the warning signal.

7. The carbon brush holder as defined in claim 6, wherein said holder body further comprises a copper barrel in which said receiving slot is provided, said copper barrel having a through hole running therethrough between said receiving slot and an outside thereof; said sensing unit further comprises an insulated plug inserted into said through hole of said copper barrel; wherein said first and second tongues are mounted through said insulated plug.

8. The carbon brush holder as defined in claim 6, wherein said premonitory

circuit comprises a normally open switch loop and a warning unit, said switch loop being electrically conducted while said spring contacts said respective tongue to enable said warning unit to generate the warning signal.

9. The carbon brush as defined in claim 1, wherein said holder body comprises a receiving slot for receiving therein said carbon brush and a spring; said sensing unit comprises a first tongue and a second tongue, said first and second tongues being mounted on said holder body and spaced apart from each other for a distance, each of said two tongues having an end extending into said receiving slot, said two ends contacting each other, the length that one of said two tongues extends into said receiving slot being larger than the other tongue, one of said tongues being disposed in a position where said respective tongue is contacted by said spring when said spring extends such that said respective tongue that is contacted by said spring is bent to disengage from the other tongue, further activating said premonitory circuit to generate the action or the warning signal.

10. The carbon brush as defined in claim 9, wherein said holder body further comprises a copper barrel in which said receiving slot is provided, said copper barrel having a through hole running therethrough between said receiving slot and an outside thereof; said sensing unit further comprises an insulated plug inserted into said through hole of said copper barrel; wherein said first and second tongues are mounted through said insulated plug.

11. The carbon brush as defined in claim 9, wherein said premonitory circuit comprises a normally close switch loop and a warning unit, said switch loop being off to

activate said warning unit to generate the warning signal while said spring contacts said respective tongue.

12. The carbon brush holder as defined in claim 1, wherein said holder body comprises a receiving slot for receiving therein said carbon brush and a spring connected between said holder body and said carbon brush; said sensing unit comprises a tongue mounted on said holder body and having an end extending into said receiving slot to keep contacting said carbon brush; when said carbon brush disengages from said tongue, said premonitory circuit is activated to generate the action or the warning signal.

13. The carbon brush holder as defined in claim 12, wherein said holder body further comprises a copper barrel in which said receiving slot is provided, said copper barrel having a through hole running therethrough between said receiving slot and an outside thereof; said sensing unit further comprises an insulated plug inserted into said through hole of said copper barrel; wherein said tongue is mounted through said insulated plug.

14. The carbon brush as defined in claim 12, wherein said premonitory circuit comprises a normally close switch loop and a warning unit, said switch loop being off to generate the warning signal while said tongue disengages from said carbon brush.

15. The carbon brush as defined in claim 1, wherein said holder body comprises a receiving slot for receiving therein said carbon brush and a spring connected between said holder body and said carbon brush; said sensing unit is a resilient switch composed of a shell, a spring, and an actuating bar, each of said shell

and said actuating bar having a conductive piece; when said actuating bar is exerted by none of any force, said spring keeps pushing against said actuating bar to enable said two conductive pieces to contact each other; when said actuating bar is exerted by a force, said actuating bar moves towards inside of said shell to compress said spring to enable said two conductive pieces to disengage from each other, said resilient switch being mounted on said holder body, said actuating bar keeping oppressed by said carbon brush to move towards inside of said shell; when said carbon brush disengages from said actuating bar, said two conductive pieces contact each other to activate said premonitory circuit to generate the action or the warning signal.

16. The carbon brush as defined in claim 15, wherein said premonitory circuit comprises a normally open switch loop and a warning unit, said switch loop being electrically conducted to activate said warning unit to generate the warning signal while said two conductive pieces of said resilient switch contact each other.

17. The carbon brush as defined in claim 1, wherein said sensing unit is composed of an infrared transmitter and an infrared receiver, said infrared transmitter and receiver being mounted at two opposite sides of said holder body, said carbon brush interrupting the communication between said infrared transmitter and receiver; when said carbon brush moves away to remove the interruption of the communication, said premonitory circuit is activated to generate the action or the warning signal.